

INTERNATIONAL SEARCH REPORT

International Application No
PCT/US2004/034448

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 A61K39/00 C12N5/06

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 7 A61K C12N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, BIOSIS, EMBASE, WPI Data, Sequence Search

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	WO 03/024393 A (OPEXA PHARMACEUTICALS, INC; BAYLOR COLLEGE OF MEDICINE; ZHANG, JINGWU) 27 March 2003 (2003-03-27) cited in the application claims 1-20 ----- STEINMAN LAWRENCE: "Myelin-specific CD8 T cells in the pathogenesis of experimental allergic encephalitis and multiple sclerosis" JOURNAL OF EXPERIMENTAL MEDICINE, vol. 194, no. 5, 3 September 2001 (2001-09-03), pages F27-F30, XP002322201 ISSN: 0022-1007 cited in the application the whole document ----- -/-	1-14
Y		1-14

Further documents are listed in the continuation of box C.

Patent family members are listed in annex

° Special categories of cited documents

- *A* document defining the general state of the art which is not considered to be of particular relevance
- *E* earlier document but published on or after the international filing date
- *L* document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- *O* document referring to an oral disclosure, use, exhibition or other means
- *P* document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance, the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance, the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

& document member of the same patent family

Date of the actual completion of the international search

Date of mailing of the international search report

24 March 2005

08/04/2005

Name and mailing address of the ISA

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No
Y	HUSEBY ERIC S ET AL: "A pathogenic role for myelin-specific CD8+ T cells in a model for multiple sclerosis" JOURNAL OF EXPERIMENTAL MEDICINE, vol. 194, no. 5, 3 September 2001 (2001-09-03), pages 669-676, XP002322200 ISSN: 0022-1007 cited in the application the whole document -----	1-14
Y	SUN D ET AL: "Myelin antigen-specific CD8+ T cells are encephalitogenic and produce severe disease in C57BL/6 mice." JOURNAL OF IMMUNOLOGY (BALTIMORE, MD. : 1950) 15 JUN 2001, vol. 166, no. 12, 15 June 2001 (2001-06-15), pages 7579-7587, XP002322202 ISSN: 0022-1767 the whole document -----	1-14
Y	TSUCHIDA T ET AL: "AUTOREACTIVE CD8+ T-CELL RESPONSES TO HUMAN MYELIN PROTEIN-DERIVED PEPTIDES" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 91, no. 23, November 1994 (1994-11), pages 10859-10863, XP001010361 ISSN: 0027-8424 cited in the application the whole document -----	1-14
Y	MARTIN R ET AL: "A MYELIN BASIC PROTEIN PEPTIDE IS RECOGNIZED BY CYTOTOXIC T CELLS IN THE CONTEXT OF FOUR HLA-DR TYPES ASSOCIATED WITH MULTIPLE SCLEROSIS" JOURNAL OF EXPERIMENTAL MEDICINE, TOKYO, JP, vol. 173, no. 1, January 1991 (1991-01), pages 19-24, XP000578296 ISSN: 0022-1007 cited in the application the whole document -----	1-14
A	WO 02/092773 A (ORTHO-MCNEIL PHARMACEUTICAL, INC) 21 November 2002 (2002-11-21) the whole document -----	1-14

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	STINISSEN P ET AL: "Autoimmune pathogenesis of multiple sclerosis: role of autoreactive T lymphocytes and new immunotherapeutic strategies." CRITICAL REVIEWS IN IMMUNOLOGY. 1997, vol. 17, no. 1, 1997, pages 33-75, XP009045645 ISSN: 1040-8401 the whole document -----	1-14

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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:

Although claim 9 is directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition. Moreover, claims 1-7 encompass the step of obtaining a sample from a patient, which is considered to be a surgical step.
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

- The additional search fees were accompanied by the applicant's protest.
 No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date	Patent family member(s)			Publication date
WO 03024393	A 27-03-2003	US 2003091578 A1			15-05-2003
		BR 0212504 A			24-08-2004
		CA 2459969 A1			27-03-2003
		EP 1416956 A2			12-05-2004
		HU 0401519 A2			29-11-2004
		JP 2005502721 T			27-01-2005
		WO 03024393 A2			27-03-2003
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WO 02092773	A 21-11-2002	CA 2447593 A1			21-11-2002
		EP 1407004 A2			14-04-2004
		WO 02092773 A2			21-11-2002
		US 2003170212 A1			11-09-2003